

# Adhesives Toolkit Analysis

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# Adhesives Toolkit Analysis Module

- Initial module is a program to calculate shear stresses and strains in a coaxial joint
- Will demonstrate concept
- Will be useful to give understanding of nonlinear stress distribution
- Will demonstrate input and output capabilities
  - Text input and output
  - Graphical output

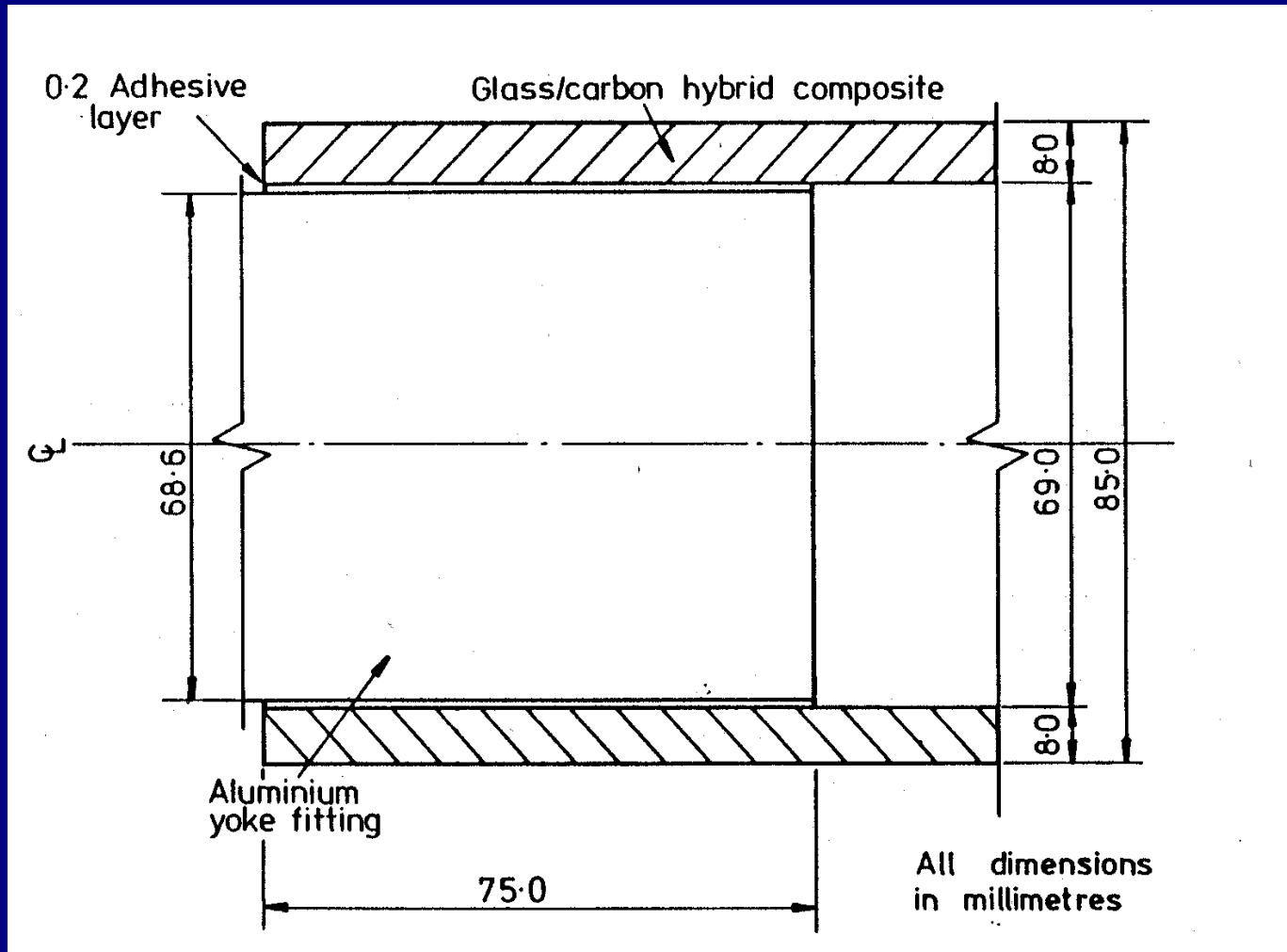
# Adhesives Toolkit Analysis Module

- Inputs
  - Adherend properties (linear)
  - Adhesive properties (linear and nonlinear)
  - Geometry
    - Adherend and adhesive thicknesses
    - Inner radius of outer adherend
    - Multiple steps possible
  - Loadings
    - Axial or torsional
    - Temperature difference from cure

# Adhesives Toolkit Analysis Module

- Output
  - Shear stresses and strains in adhesive
  - Shear or axial stress in adherends
  - Table of results
  - Graphical

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